

REMARKS

Claims 18-45 are now pending. The Examiner rejected claims 18, 19, 25-27, and 31; objected to claims 20, 28-30, 32, and 33; and allowed claims 21-24 and 34-45.

Allowed Claims

The Examiner has allowed claims 21-24 and 34-45. Applicants acknowledge with appreciation Examiner's allowance of claims 21-24 and 34-45, as set forth in the August 31, 2006 Office Action.

To the extent that the Reasons for Allowance suggest or state that certain limitations not found in the prior art are present in each of the claims 21-24 and 34-45 (whether or not specific language to that effect is actually found in every claim), Applicants note that the record as a whole must supplement the Examiner's stated Reasons for Allowance of claims 21-24 and 34-45. Applicants interpret the Examiner's statements regarding the reasons for allowing claims 21-24 and 34-45 to be only a few of the reasons for allowance of claims 21-24 and 34-45, and that other reasons also exist for allowance of the claims such as, for example, those set forth more completely in the record as a whole, particularly the claims. This interpretation is consistent with MPEP 1302.14, which states that any statement of reasons for allowance "[i]s not intended to necessarily state all the reasons for allowance or all the details why claims are allowed and should not be written to specifically or impliedly state all the reasons for allowance are set forth."

Claim Objections

The Examiner objected to claims 20, 28-30, 32, and 33, and indicated that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants note with appreciation Examiner's indication of allowability of the objected to claims if rewritten, however, Applicants respectfully traverse the objection to claims 20, 28-30, 32, and 33 as being moot in light of the following remarks.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 18, 19, 25, 27, and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chennakeshu (U.S. Patent No. 5,406,593) in view of Merriam Webster's Collegiate Dictionary and further in view of Stewart (U.S. Patent No. 5,671,253).

Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chennakeshu (U.S. Patent No. 5,406,593) in view of Merriam Webster's Collegiate Dictionary and further in view of Stewart (U.S. Patent No. 5,671,253) and Kavcic (U.S. Patent No. 6,438,180).

With regard to an obviousness rejection, MPEP 2142 states that in order for a *prima facie* case of obviousness to be established, three basic criteria must be met, one of which is that the reference or combination of references must teach or suggest all the claim limitations. Further, MPEP 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination", and that "although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so'" (citing *In re Mills*, 916 F. 2d 680, 16 USPQ 2d 1430 (Fed Cir. 1990)). Moreover, MPEP 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion ..." citing *Al-Site Corp. v. VSI Int'l Inc.*, 174 F. 3d 1308, 50 USPQ 2d. 1161 (Fed Cir. 1999) is that the reference or combinations of references must teach or suggest all the claim limitations.

Regarding independent claim 18 and its dependent claims (i.e., claims 19, 20, and 25-33), claim 18 recites: "[a] method of impairment mitigation in a communication system comprising: generating at least one error estimate of a signal; determining a channel fidelity metric using the at least one error estimate; generating a branch metric for a decoder; modifying the branch metric based on the channel fidelity metric; and decoding the signal using the modified branch metric."

It is respectfully submitted that the referenced art, Chennakeshu in view of Merriam Webster's Collegiate Dictionary and further in view of Stewart, fails to disclose the claimed invention of claim 18. More specifically, Chennakeshu fails to disclose "modifying the branch metric based on the channel fidelity metric; and decoding the signal using the modified branch metric." This is based on, among other things, the Examiner's earlier statement in previous

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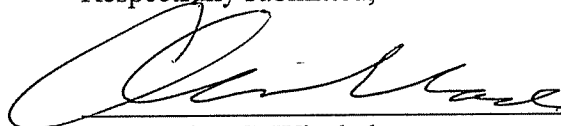
office actions. More specifically, in the Office Action of April 19, 2005, the Examiner rejected claim 18 citing Chennakeshu, and specifically, citing this reference as showing a method comprising, among other things, "modifying the branch metric based on the channel fidelity metric; and decoding the signal using the modified branch metric." In response to the Applicants' arguments to the Office Action of April 19, 2005, the Examiner indicated that claim 18 was allowed in the Office Action of September 30, 2005. The Examiner in that office action indicated that one of the reasons for allowing claim 18 was because the "art of record does not suggest... modifying the branch metric based on the channel fidelity metric, and decoding the signal using the modified branch metric." Therefore, the Examiner effectively agreed with Applicants and admitted that Chennakeshu does not teach, at least, "modifying the branch metric based on the channel fidelity metric based on the channel fidelity metric, and decoding the signal using the modified branch metric." The Applicants agreed then and also now agree with the Examiner's admission in that Office Action of September 30, 2005.

Based on at least the foregoing, Applicants believe that all pending claims are in condition for allowance and respectfully requests that the application be allowed and passed to issuance. If the Examiner disagrees or has questions regarding this submission, Applicants invite the Examiner to telephone the undersigned at (312) 775-8000.

The Commissioner is hereby authorized to charge additional fees or credit overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,



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